

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl.No.: 09/896,386
Appellant: Budagavi
Filed: 06/29/2001
TC/AU: 2621
Examiner: Lee

Confirmation No.: 9533

Docket: TI-31209
Cust.No.: 23494

APPEAL BRIEF

Commissioner for Patents
P.O.Box 1450
Alexandria VA 22313-1450

Sir:

The attached sheets contain the Rule 41.37 items of appellant's Appeal Brief pursuant to the Notice of Appeal filed 05/14/2007. The Director is hereby authorized to charge the fee for filing a brief in support of the appeal plus any other necessary fees to the deposit account of Texas Instruments Incorporated, account No. 20-0668.

Respectfully submitted,

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Rule 41.37(c)(1)(i) Real party of interest

Texas Instruments Incorporated owns the application.

Rule 41.37(c)(1)(ii) Related appeals and interferences

There are no related dispositive appeals or interferences.

Rule 41.37(c)(1)(iii) Status of claims

Pursuant to MPEP 1205.02, for each claim in the case appellant states the status as follows:

Claim 1: rejected

Claim 2: rejected

Claim 3: rejected

Claim 4: objected to

Claim 5: rejected

Pursuant to MPEP 1205.02, appellant identifies each claim on appeal as follows

Claim 1: on appeal

Claim 2: on appeal

Claim 3: on appeal

Claim 5: on appeal

Rule 41.37(c)(1)(iv) Status of amendments

There is no amendment after final rejection.

Rule 41.37(c)(1)(v) Summary of claimed subject matter

The independent claims on appeal consist of method claim 1 and apparatus claim 5.

1. The subject matter of claim 1 is a method for motion compensation video, comprising:

(a) assessing parameters of a packetized transmission channel (application page 4, line 8 to page 5, line 17);

(b) assessing sizes of intra-coded frames and predictively-coded frames for an input video (application page 4, lines 21-22);

(c) setting the rate of intra-coded frames and the rate of predictively-coded frames by maximizing a probability of correct frame reconstruction using the results of steps (a) and (b) (application page 5, lines 18-28), wherein said probability of correct frame reconstruction includes a rate of repeated transmission of predictively-coded frames (application page 5, line 19).

2. The subject matter of claim 5 is a motion compensation controller for video, comprising:

(a) a first input for channel parameters of a packetized transmission channel (application page 8, lines 16-21; FIG.5 vertical broken arrow; application page 4, line 8 to page 5, line 17);

(b) a second input for video parameters (application page 8, lines 16-21; FIG.5 horizontal broken arrow; page 4, lines 21-22); and

(c) a probability maximizer coupled to said first and second inputs and with an output of an intra-coded frame transmission rate over said channel, a predictively-coded frame transmission rate over said channel, and a repetition rate for transmission of said predictively-coded frames over said channel (application page 8, lines 16-21; FIG.5 "Markov analysis"); said probability maximizer maximizes a probability of correct frame reconstruction using said first and second inputs wherein said probability of correct frame reconstruction includes a rate of repeated transmission of predictively-coded frames (application page 8, lines 16-21 and page 5, lines 18-28).

Rule 41.37(c)(1)(vi) Grounds of rejection to be reviewed on appeal

The grounds of rejection to be reviewed on appeal are:

1. Claims 1-3 and 5 were rejected under 35 USC § 102(e) as being anticipated by Rhee (USP 6,421,387).

Rule 41.37(c)(1)(vii) Arguments

1. Claims 1-3 and 5 were rejected as anticipated by Rhee.

Claims 1-3 and 5: Base claims 1 and 5 each requires use of the transmission channel conditions to determine the coding of the video frames: the rate of encoding a frame as an I-frame versus the rate of encoding the frame as a P-frame, including repeated P-frames. In contrast, cited Rhee FIG.6 adjusts the number of FEC packets (i.e., parity packets) for periodic frames according to the transmission channel conditions (Rhee column 9, line 54 to column 10, line 3). That is, Rhee takes as input data which is the encoded video (the rate of periodic frames already determined) and adjusts the parity rate as part of channel coding, whereas base claims 1 and 5 adjust the video coding itself, not the error-correcting channel coding of Rhee. Consequently, Rhee does not suggest the claims.

Rule 41.37(c)(1)(viii) Claims appendix

Claim 1: A method for motion compensation video, comprising:

- (a) assessing parameters of a packetized transmission channel;
- (b) assessing sizes of intra-coded frames and predictively-coded frames for an input video;
- (c) setting the rate of intra-coded frames and the rate of predictively-coded frames by maximizing a probability of correct frame reconstruction using the results of steps (a) and (b), wherein said probability of correct frame reconstruction includes a rate of repeated transmission of predictively-coded frames.

Claim 2: The method of claim 1, wherein:

- (a) said transmission channel is the Internet; and
- (b) said predictively-coded frames are P-frames.

Claim 3: The method of claim 1, wherein:

- (a) said parameters of step (a) of claim 1 include the packet loss rate over said transmission channel.

Claim 5: A motion compensation controller for video, comprising:

- (a) a first input for channel parameters of a packetized transmission channel;
- (b) a second input for video parameters; and

(c) a probability maximizer coupled to said first and second inputs and with an output of an intra-coded frame transmission rate over said channel, a predictively-coded frame transmission rate over said channel, and a repetition rate for transmission of said predictively-coded frames over said channel; said probability maximizer maximizes a probability of correct frame reconstruction using said first and second inputs wherein said probability of correct frame reconstruction includes a rate of repeated transmission of predictively-coded frames.

Rule 41.37(c)(1)(ix) Evidence appendix

none

Rule 41.37(c)(1)(x) Related proceedings appendix

none